



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/571,886	03/13/2006	Donald Robert Langdon	2003CH201	2678
25255	7590	05/15/2009	EXAMINER	
CLARIANT CORPORATION			TAYLOR II, JAMES W	
INTELLECTUAL PROPERTY DEPARTMENT				
4000 MONROE ROAD			ART UNIT	PAPER NUMBER
CHARLOTTE, NC 28205			1796	
			MAIL DATE	DELIVERY MODE
			05/15/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/571,886	LANGDON ET AL.	
	Examiner	Art Unit	
	James W. Taylor II	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 27 April 2009.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-6 and 8-11 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-6 and 8-11 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5) Notice of Informal Patent Application

6) Other: _____.

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114.
2. All objections and rejections not explicitly maintained below are hereby withdrawn in light of applicant's amendment filed on 4/27/2009.
3. The text of those sections of Title 35, U.S. Code not included herein can be found in a prior office action.

Prior Art

4. It is noted that in applicant's amendment dated 4/27/2009 (henceforth "the present amendment"), the applicant made reference to the Polyurethane Handbook (Gunther Oertel, Hanser Publishers, New York, 1985, p. 406; the present amendment, p. 5, ll. 23-24). On 5/5/2008, the examiner contacted Anthony Bisulca (reg. no. 40,913) to obtain a copy of the reference. Mr. Bisulca complied, and the reference the examiner received is being made of record in the attached Notice of References Cited (PTO-892).

Claim Objections

5. Claims 1-6 and 8-11 are objected to because of the following informalities: said claims claim a composition “wherein the laser markable composition is made by an extrusion process, press moulding, injection moulding, or blow moulding.” The referenced limitation is a characterization of a different statutory class of invention according to 35 U.S.C. §101, specifically products. Thus, it is unclear what exactly the applicant is trying to claim: a composition (i.e., a mere mixture of matter, wherein the materials of the matter may have form on the molecular scale—core-shell particles, encapsulated droplets, emulsified particles, aerosol particles, and fibers for example—but the overall mixture does not) or a product (i.e., more structure than a mere mixture of matter). Appropriate correction is required.

Claim Rejections - 35 USC § 103

6. Claims 1, 4-6, and 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cradic *et alii* (US 2002/0072559 A1) in view of Toshikatsu *et alii* (JP H05-571886 A).

7. A machine translation was relied upon in formulating the instant rejection. All citations to Toshikatsu are mapped into the machine translation for convenience.

8. Cradic teaches a colored data storage media (ti.). A complete reading of the reference will elucidate the various components of substrate layer used in the data storage media. The substrate can comprise a polyolefin matrix (par. 14), zinc sulfide (par. 34), mica (par. 31), and non-black organic pigments (pars. 28-29). Extrusion

techniques can be used to produce the final product (par. 36). It is also noted that Cradic's claim 8 claims the mica as a component of the substrate.

9. Cradic fails to teach (i) this specific combination of elements as an embodiment and (ii) the presently claimed amount zinc sulfide.

10. Regarding teaching (i), KSR rationale (e) supports the use of obvious to try principles. Thus, under KSR rationale (e), it would have been obvious to try using any combination of disclosed components to try to synthesize a functioning product.

Because Cradic has disclosed all of the elements presently claimed in its disclosure, it would have therefore been obvious in the absence of unexpected results for one of ordinary skill in the art at the time of the invention to try using the presently claimed combination of elements.

11. Regarding teaching (ii), Toshikatsu teaches a colored polyarylene sulfide resin composition. The reference is only relied upon to show that in the chemical arts despite other potential utilities, zinc sulfide is known as a pigment (ab.). In Toshikatsu, zinc sulfide is used at a loading of 0.05 parts per 300 parts by weight (i.e., 100 parts polyarylene sulfide resin, 200 parts fibrous filler, and negligible amounts of zinc sulfide) to 5 parts per 110 parts by weight (100 parts polyarylene sulfide resin, 5 parts fibrous filler, and 5 parts zinc sulfide) in the reference (ab.). Therefore, it is reasonable to conclude that this is an acceptable, general working-range zinc sulfide to be utilized as a pigment. Upon conversion to weight percent, one calculates an approximate loading of 0.017 to 4.5 weight percent. This undisclosed, yet intrinsic, range wherein zinc sulfide is an effective pigment substantially overlaps with the presently claimed range.

Therefore, the claimed range would have been obvious to one having ordinary skill in the art at the time the invention was made, since it has been held that claiming an overlapping portion of the range taught in the prior is a *prima facie* case of obviousness.

See *In re Malagari*, 182 USPQ 549 and MPEP 2144.05 (I).

12. Regarding claims 4-5, as noted above, zinc sulfide can be used in the composition.

13. Regarding claims 6, 9, and 11, mica is disclosed as a colorant in Cradic (par. 31). One of ordinary skill in the art would have motivation to raise or lower the amount of colorants in the composition for aesthetic purposes. Thus, the concentrations of mica and the pigments of Cradic are result effective variables. Optimization of result effective variables through routine experimentation is not a patentable distinction. See *In re Beosch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980) and MPEP 2144.05 (II) (B).

14. Regarding claim 8, the courts have stated that a chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical or substantially identical chemical structure and/or composition, the physical properties Applicant discloses and/or claims are necessarily present. See *In re Spada*, 911 F.2d 705, 15 USPQ2d 1655, (Fed. Cir. 1990). "Where the claimed and prior art products are identical or substantially identical in structure or composition, or are produced by identical or substantially identical processes, a *prima facie* case of either anticipation or obviousness has been established." *In re Best*, 562 F.2d 1252, 195 USPQ 430, (CCPA 1977). Further, if it is the applicant's position that this would not be the case, factual evidence would need to be provided to support the applicant's position.

15. Regarding claim 10, the examiner takes the position that even with the narrower claimed range, there is still a substantial overlap in scope between the range intrinsic in Toshikatsu and the range presently claimed. Nonetheless, even if there weren't a substantial overlap in scope between said ranges, because Toshikatsu discloses zinc sulfide as a pigment, for the same reasons presented above in paragraph 13 for other pigments, it would have been obvious to optimize the amount of zinc sulfide.

16. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cradic *et alii* (US 2002/0072559 A1) in view of Toshikatsu *et alii* (JP H05-571886 A) as applied to claims 1, 4-6, and 8-11 above, further in view of Hartman *et alii* (US 6,019,833).

17. Cradic in view of Toshikatsu fails to teach that the mica is coated with metal oxide.

18. Hartman teaches a light colored conductive coating and associated processes (ti.). Specifically, the examiner is relying on Hartman to show that micas encapsulated in metal-oxides are known as special effect pigments (c. 5, II. 21-38).

19. Given that Cradic is open to micas and explicitly open to using micas, "further color or design," decoration (implied from decorative layers), and "sparkle" (all from par. 31), it would have been obvious at the time of the invention to use the metal-oxide coated mica either in addition to or in place of the generic mica to obtain a special effect decoration in the disc.

Response to Arguments

20. Applicant's arguments, see pages 4-6 of the present amendment, with respect to the rejection(s) of claim(s) 1-6 and 8-11 under Hartman *et alii* (US 6,019,833) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Cradic *et alii* (US 2002/0072559 A1) in view of Toshikatsu *et alii* (JP H05-571886 A) in view of Hartman. See above.

Conclusion

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James W. Taylor II whose telephone number is (571) 270-5457. The examiner can normally be reached on Monday to Friday, 8:00 am to 5:00 pm.

22. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

23. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James W Taylor II/
Examiner, Art Unit 1796

jwt2

/Vasu Jagannathan/
Supervisory Patent Examiner, Art Unit 1796